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**Remarks**

Claims 1-17 are currently pending in the application. Claims 1-17 were rejected. Claims 1 and 7 are amended. Remarks made herein are based on the claims as amended hereby. New claims 18 and 19 have been added. Support for the amendments is found at page 1, line 25; page 2, line 13-17; page 7, line 21-23; and in the Examples.

**35 USC §112 Rejections**

Claims 3 and 13 were rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is requested that this rejection be withdrawn.

In claim 3, the Examiner rejected based on use of the term "acid functional equivalent weight". Applicant's specification teaches how to calculate this value, by dividing 56,100 by the acid value of the polymer, see page 4, line 14-17. It is well known in the polymer arts that the acid value, also known as the acid number, is the milligrams of KOH (56,100 mg/mol) required to neutralize the free fatty acids present in one gram of the polymer being tested. Likewise, it is known in the art that "equivalent weight of a functional group means the ratio of the molecular weight to the number of occurrences of that functional group in the molecule." 40 CFR 723.250(b). Based on the foregoing, Applicants submit that one of ordinary skill in the art would readily understand that a polymer having "an acid functional equivalent weight of greater than 300 g/mole", as claimed in claim 3, is a polymer wherein more than 300 grams of polymer is required to provide 1 mole of acid functional group. This value is readily determined by titration with KOH and known calculations. The rejection should be withdrawn.

The Examiner has also rejected claim 13 for use of the term "number average molecular weight", which is a way of describing the molecular weight of a polymer. It is known in the polymer arts that polymer molecules, even ones of the same type formed during a polymerization, do not all have exactly the same molecular weight. Some variability in the molecular weight from molecule to molecule of a polymer is found due to differences in the number of monomer molecules incorporated in each polymer molecule. As one means

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of addressing this fact, those of skill in the art use the number average molecular weight to determine the molecular weight of the polymer. "Number-average molecular weight means the arithmetic average (mean) of the molecular weight of all molecules in a polymer." 40 CFR 723.250(b). It is well known in the art that number average molecular weight is determined by measuring the molecular weight of "n" polymer molecules, summing the weights, and dividing by "n". One of ordinary skill in the art can readily understand that a polymer having "a number average molecular weight of at least 500", as claimed in claim 13, is a polymer wherein the average of the molecular weights of the molecules in the polymer is at least 500. There are well-accepted techniques known in the art for measuring the molecular weights used in calculating the number average molecular weight of a polymer. The rejection should be withdrawn.

#### **35 USC §102 Rejections**

Claims 1, 3-5, 7, 10 and 13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Bergishagen et al. (US 5,443,748). This rejection is traversed. Amended claim 1, and the claims depending therefrom, recite a method for flushing uncured solvent-based paint from a spray-coating device comprising using a polymer dissolved in organic solvent which remains dissolved throughout contact with the spray-coating device.

The first embodiment of Bergishagen is directed to cleaning interior paint line systems which requires a composition that has insoluble particles during part of the cleaning cycle, see Col. 2, line 24-47. This teaching is contrary to Applicants' claim 1, which provides polymer dissolved in organic solvent throughout the contact with the device being cleaned. The second embodiment of Bergishagen is directed to cleaning the walls of exterior surfaces, such as paint booth walls, see Col. 2, line 48-61. This embodiment of Bergishagen requires a rheological additive that coagulates the paint on the surface being cleaned, which coagulated paint is removed from the wall during rinsing. This second embodiment also fails to teach Applicants' claim 1 which requires dissolved polymer throughout contact that disperses the uncured paint. Dispersing paint is known in the paint stripping arts as being dissimilar to coagulating. Specifically, "disperse" is defined as "to cause to break up and

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move or scatter in different directions", whereas "coagulate" is defined as "to cause to become viscous or thickened into a coherent mass", see Webster's Seventh New Collegiate Dictionary. As such, the teachings of both Bergishagen's embodiments fail to anticipate Applicants' claims 1, 15 and their dependent claims. The rejection should be withdrawn.

### **35 USC §103 Rejections**

Claims 6 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergishagen et al (US 5,443,748). This rejection is traversed. These claims depend from independent claim 1. As a preliminary matter, Applicants submit that the features of claim 1 discussed above, would not have been obvious to one of ordinary skill in the art reading Bergishagen at the time the invention was made.

MPEP § 2143 states the basic requirements for a prima facie case of obviousness under § 103(a) as follows:

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some *suggestion or motivation*, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, *the prior art reference (or references when combined) must teach or suggest all the claim limitations*. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)." (emphasis added)

Applicants submit that the Examiner has failed to establish a prima facie case of obviousness of claims 6 and 9 in view of Bergishagen where there is no independent motivation to modify Bergishagen as suggested by the Examiner.

The Examiner has stated:

Bergishagen et al. fail to teach the specific concentration of each of the organic solvent. In the absence of a showing of criticality, adjusting the concentration would have been within the level of the skilled artisan. (Official Action mailed January 12, 2006, paragraph 7.)

However, it is not only the amounts of solvent components that were selected by

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Applicants; it is also the particular combination of solvents selected. There is no teaching or suggestion in Bergishagen to select the solvents chosen by Applicants.

In order to support a rejection under 35 U.S.C. §103, "[s]omething in the prior art as a whole must suggest the desirability, and, thus, the obviousness, of making" the modification to the art suggested by the Examiner. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051, 5 U.S.P.Q. 2d (BNA) 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988).

The Examiner's alleged motivation appears to be that one skilled in the art would be motivated to try experimenting with the make-up of the sixteen groups of solvent compositions taught by Bergishagen and ultimately obtain the claimed invention. This reasoning is nothing more than an improper "obvious to try" argument.

It is well-settled that a finding of obviousness cannot be based on the belief that the prior art would have made it "obvious to try" an alternative as one among numerous combinations of potential experiments. See *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1380 (Fed. Cir. 1986), and see *In re Geiger*, 815 F.2d 686, 688 (Fed. Cir. 1987). Rather, to support a conclusion of obviousness, the prior art must motivate the combination claimed and demonstrate a reasonable expectation of actual success with respect to the particular modification at issue. See *Yamanouchi Pharm. Co. v. Danbury Pharm., Inc.*, 231 F.3d 1339, 1345 (Fed. Cir. 2000).

The Bergishagen reference provides no motivation or showing of the desirability of selecting the particular combination of ketone, aromatic hydrocarbon, ester, alcohol, and for claim 9, aliphatic hydrocarbon, claimed by Applicants for use as the solvent vehicle with the polymer. Indeed, Bergishagen teaches against use of such a combination, where it states: "The basic requirement of the vehicle is that it be inert to the rheological material during the cleaning or stripping cycle whether or not it is for cleaning internal paint lines or external surfaces." Col. 4, line 28-31.

A prior art reference must be considered in its entirety, that is, as a whole, including portions that would lead away from the claimed invention. M.P.E.P. § 2141.02; *Bausch & Lomb v. Barnes-Hind/Hydrocurve, Inc.*, 796 F.2d 443, 448, 230 USPQ 416, 420 (Fed. Cir.

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1986). As the Court in *Bausch & Lomb* affirmed, "[i]t is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one skilled in the art." *Id.*, citing *In re Wesslau*, 353 F.2d 238, 241, 147 USPQ 391, 393 (CCPA 1965).

Bergishagen clearly teaches that the cleaning cycle is different from the rinsing cycle and that the carrier solvents for the cleaning cycle must not dissolve the polymer. One of skill in the art at the time the invention was made would not have been motivated by Bergishagen, to use Applicants' combination where Applicants' polymer would have dissolved in the organic solvent mixture, contrary to Bergishagen's teachings.

Claims 2, 11-12, 14 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergishagen et al in view of Waldmann et al (US 5,294,352). This rejection is traversed.

All of the rejected claims depend from an independent claim reciting that the paint is being dispersed in Applicants' process. The Examiner has stated that the aqueous-based organic solvent mixture of Bergishagen is being modified to include the polymers of Waldmann reasoning that the motivation would arise from performing the same function of paint removal. Both references remove paint by coagulation. Waldmann teaches inorganic-organic and/or organic alloy polymer adduct compositions that coagulate paint for removal: "The industrial waste water and water-borne paints treated with the inorganic-organic and/or organic alloy polymer adducts have a high impact on coagulation processes. These act as primary coagulants which under neutralization processes (preferable "hydrophobe" compositions) will floc and kill the paint." Col. 2, lines 60-66. Likewise, as discussed above, Bergishagen also teaches coagulation. It would not have been obvious to one of ordinary skill in the art at the time the invention was made to attempt to modify Bergishagen by using the Waldmann polymers to try to achieve Applicants' invention. Even if such an attempt were made, the result would be a coagulating composition, which is not useful in Applicants'

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invention directed to dispersing and removing the uncured paint. This rejection should be withdrawn.

**Conclusion**

Applicants request reconsideration in view of the amendments and remarks contained herein. Applicants additionally request a telephonic interview with the Examiner to further clarify the invention.

Respectfully submitted,



Mary K. Cameron  
(Reg. No. 34,789)  
Attorney for Applicants  
248-589-4672

Henkel Corporation  
Patent Law Department  
2200 Renaissance Boulevard, Suite 200  
Gulph Mills, PA 19406